Notes in response to issues raised in the International Search Report for PCT/AU2005/000552.

1. US 5841914 (Shieh et al.) 24 November 1998. (Citation 1)

This citation (Citation 1) teaches an essentially *hybrid* biochip as defined on page 3 of our PCT publication wherein the light source(s) (being a part of the optical means for determining a specific binding event) is separate from the biochip itself. The current invention, as described in the specification and expressed in claim 1, proposes monolithic integration of optical means for determining a specific binding event in a single monolithic biochip.

Similar arguments can be applied to our claim 34, which teaches testing of biological substances by a single biochip. Citation 1 teaches using external light sources in addition to the biochip and applying electrical signals not only to the biochip itself but also to these external light sources, which is different from the current invention.

2. WO 1999/027351 A1 (Lokheed Martin Energy Research Corporation) 3 June 1999.

This citation (Citation 2) teaches a monolithic bioelectronic device for detecting a substance. It uses the light that is emitted by the biological substances during hybridization. Citation 2 teaches a biochip where the binding site and the "light source" are essentially the same, whereas our claim 1 makes it quite clear that the binding sites are separate from *optical means for determining a specific binding event.*

3. US 2003/0059820 A1 (Vo-Dinh) 27 March 2003
4. US 2003/0035755 A1 (Chen at al.) 20 February 2003
5. WO 2000/043552 A2 (Lockheed Martin Energy Research Corporation) 27 July 2000

These citations (Citations 3,4,5) teach various alternatives of *hybrid* integration whereby either light sources or photodetectors are located externally to the biochip containing binding sites and microassembled together. This is different from the monolithic integration of the current invention.